

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.		
09/756,743	01/10/2001	Jorg Kleiber	1803-337 1340		
7590 02/11/2004		EXAMINER			
PENNIE & EDMONDS LLP			NAFF, DAVID M		
1155 Avenue of the Americas New York, NY 10036-2711			ART UNIT	PAPER NUMBER	
1.0 1011, 1.1			1651	*	

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	n No.	Applicant(s)			
Office Action Summary		09/756,743	3	KLEIBER ET AL.			
		Examiner		Art Unit			
		David M.	Naff	1651			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
Period fo		<b></b> .		->			
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR F MAILING DATE OF THIS COMMUNICAT unsions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communicati uperiod for reply specified above is less than thirty (30) days uperiod for reply is specified above, the maximum statutory uper to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	ION. CFR 1.136(a). In no ever ion. s, a reply within the statul period will apply and will v statute, cause the appli	nt, however, may a reply be tim cory minimum of thirty (30) days expire SIX (6) MONTHS from cation to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status							
1)⊠	1) Responsive to communication(s) filed on 06 November 2003.						
,—	This action is <b>FINAL</b> . 2b) This action is non-final.						
3)□							
	closed in accordance with the practice un	nder <i>Ex parte Qua</i>	ayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposit	ion of Claims						
4)⊠	Claim(s) <u>13-18 and 23-28</u> is/are pending	in the application	,				
,	4a) Of the above claim(s) <u>13-18</u> is/are withdrawn from consideration.						
5)□	☐ Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>23-28</u> is/are rejected.						
7)							
8)[	Claim(s) are subject to restriction a	and/or election re	quirement.				
Applicat	ion Papers						
9)[	The specification is objected to by the Exa	aminer.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (	under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)⊠ All b)□ Some * c)□ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No. <u>08/952,969</u> .							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) X Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/ser No(s)/Mail Date 11/6/03.			atent Application (PTO-152)			

Application/Control Number: 09/756,743 Page 2

Art Unit: 1651

15

20

25

### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/6/03 has been entered.

The submission contained an Information Disclosure Statement and did not amend the claims.

Claims 13-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 8 (filed 4/29/02).

Claims examined on the merits are 23-28.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### Specification

The disclosure is objected to because of the following informalities: the abstract is not sufficiently descriptive of the disclosure. The following abstract is suggested ---

Magnetic glass particles are prepared containing a magnetic core coated with a glass layer having a substantially pore-free glass surface or having pores with a diameter of less than 10 nm. The particles are used for separating biological material such as nucleic

Application/Control Number: 09/756,743

Art Unit: 1651

acids. A preferred process of preparing the particles is by forming a mixture of magnetic cores with a sol formed from an alcohol and a metal alkoxide, spray-drying the mixture to coat the cores with a layer of gelled sol, and heating the coated cores to obtain the magnetic glass particles. Preferably, the particles have an average particle size of less than 100  $\mu m$ . The magnetic core may be a composite material containing a mica core and magnetite particles immobilized on the mica core, and the glass layer may contain boron oxide. Magnetic core materials include magnetite (Fe<sub>3</sub>O<sub>4</sub>) and Fe<sub>2</sub>O<sub>3</sub>. ---

Page 3

Appropriate correction is required.

## Claim Objections

Claims 23-28 are objected to because of the following informalities: in line 7 of claim 23, "pore free" should be changed to --- pore-free --- to be consistent with the recitation of this term 15 in the specification (page 2, penultimate line).

Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 2, the claim is unclear as to whether the sample is that of claim 1 or some other sample. To be clear that the sample is that

10

20

Application/Control Number: 09/756,743 Page 4

Art Unit: 1651

10

15

20

25

of claim 1, it is suggested that --- the --- be inserted before "sample".

## Double Patenting

Claims 23-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,255,477 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the presently claimed method of separating nucleic acids using a magnetic particle having a magnetic core and boron oxide-containing glass outer layer that can have pores with a diameter of less than 10 nm would have been obvious from the claims of the patent claiming a method of making magnetic glass particles having a magnetic core and glass outer layer which can contain boron oxide and have pore diameters of less than 10 nm, and claiming a method of using the particles to separate biological material which can be a nucleic acid.

#### Double Patenting

Claims 23-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,562,568 B1 in view of claims 1-11 of U.S. Patent No. 6,255,477 B1.

The claims of the '568 patent require a process of isolating a nucleic acid with magnetic glass particles which can contain boron oxide (claim 5) by binding the nucleic acid to the particles, separating the bound nucleic acid from unbound nucleic acid and eluting the nucleic acid from the particles.

Application/Control Number: 09/756,743 Page 5

Art Unit: 1651

The methods of the claims of the '477 patent are described above.

It would have been obvious to use as the magnetic glass particles of the claims of the '568 patent, the magnetic glass particles produced by the method of the claims of the '477 patent since these magnetic glass particles would have been expected to be effective for separating a nucleic acid.

The claims are free of the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is 571-272-0920. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10

15

20

Application/Control Number: 09/756,743

Art Unit: 1651

J. . . . . . . Y

Page 6

David M. Naff Primary Examiner Art Unit 1651

5

10

DMN 2/6/04